



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/914,573	08/31/2001	Yusuke Monobe	50023-149	9622
20277	7590	10/03/2005	EXAMINER	
MCDERMOTT WILL & EMERY LLP 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096			LAROSE, COLIN M	
			ART UNIT	PAPER NUMBER
			2623	

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/914,573	MONOBE ET AL.	
	Examiner	Art Unit	
	Colin M. LaRose	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6,8,9,11-14,16,18,19,21 and 30-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4,6,8,9,11-14,16,18,19,21 and 35-41 is/are allowed.
- 6) ☒ Claim(s) 30-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/28/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Arguments and Amendments

1. Applicant's amendments and arguments filed 16 June 2005, have been entered and made of record.

Response to Amendments and Arguments

2. In view of Applicant's amendments, claims 1-4, 6, 8, 9, 11-14, 16, 18, 19, 21, and 35-41 are allowable (see paragraph 11 below).
3. Claim 30 now substantially incorporates the features of claims 8 and 18. Applicant's remarks regarding claims 8 and 18, as pertains to new claim 30, have been considered but are not persuasive. Applicant discusses why the trimmed mean method is utilized in the present invention but does not directly address why the combination of Fujimoto and Clarke is invalid. Without persuasive arguments or evidence to the contrary, the combination is presumed valid and is therefore maintained for new claim 30.

Double Patenting

4. Claim 35 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 18. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Art Unit: 2623

Specification

5. The substitute Specification is accepted and has been placed in the file.

Claim Objections

6. In view of Applicant's amendments, the previous claim objections are withdrawn.

Claim Rejections - 35 USC § 101

7. In view of Applicant's amendments, the previous claim rejections under 35 USC § 101 are withdrawn.

Claim Rejections - 35 USC § 112

8. In view of Applicant's amendments, the previous claim rejections under 35 USC § 112 are withdrawn.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

Art Unit: 2623

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 30-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,751,921 by Fujimoto in view of U.S. Patent 5,825, 936 by Clarke et al. ("Clarke").

Regarding claim 30, Fujimoto discloses a document image processor (figures 2 and 4) comprising means for:

preparing a document image by reading a paper (image scanner 22);

dividing the document image into a plurality of regions (step 406, figure 4; see also figures 5 and 6);

calculating first averages as an average of character size for characters within each region (column 7, line 33: "average value of the block" is the average character size of a segmented region), and then extracting title regions from the respective regions according to the first averages, and

calculating a second average that is an average value of character size for characters within all the regions (column 7, line 18: "average value of size of characters" is the average size of the characters in all the segmented text regions);

comparing the first averages and extracting criteria found by multiplying the second average by extracting parameters (column 7, lines 4-35: the average value of each block is compared to a "distinction criteria," which is the total average size of the characters multiplied by a magnification value; see also figure 8); and

Art Unit: 2623

extracting the regions with the first average more than the extracting criteria, as the title region (column 7, lines 50-55: the regions that have an average character size that is larger than the distinction criteria, corresponding to e.g. "threshold level 3" in figure 8, are identified as title regions and are assigned special colors as shown in figure 9; other regions such as catchwords, author, etc. are also extracted based on the size of the characters; see also figures 10 and 31).

Fujimoto is silent to calculating the first averages and the second average of character size based on characters remaining after discarding a specific proportion of the minimum and the maximum values of the character size.

Clarke discloses an image analyzing device that utilizes adaptive criteria. In particular, Clarke discloses calculating an average value according to the trimmed mean method, whereby extreme values on both the low and the high end are discarded for purposes of calculating the mean value (see column 11, lines 39-44).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fujimoto by Clarke to utilize trimmed average values, as claimed, rather than simple average values, as taught by Fujimoto, since Clarke teaches that the trimmed mean of a dataset is a conventional way to calculate a mean value and is a substantially equivalent method of calculating a mean value. The advantage lies in the fact that extreme values are discarded, so potential anomalies in the dataset do not effect the mean calculation.

Art Unit: 2623

Regarding claim 31, Fujimoto discloses calculating the region average character size and the total average size based on an average height of characters (see column 7, lines 16-35: average height).

Regarding claim 32, Fujimoto discloses calculating the region average character size and the total average size based on an average width of characters (see column 7, lines 16-35: average width may be used).

Regarding claim 33, Fujimoto discloses calculating the region average character size and the total average size based on an average area of characters (see column 7, lines 16-35: average area may be used).

Regarding claim 34, Fujimoto discloses correcting character strings of the extracted title regions (i.e. Fujimoto discloses correcting the color of the title region by assigning it a new color – figure 9).

Allowable Subject Matter

12. Claims 1-4, 6, 8, 9, 11-14, 16, 18, 19, 21, and 35-41 are allowed.

Regarding independent claims 1, 11, 21, and 35, Fujimoto discloses that the extracting parameters are 0.9, 1.1, 1.5, etc. (see column 7, lines 21-28; see also figure 8). However, Fujimoto does not disclose how these parameters are determined. Claims 1, 11, 21, 35 incorporate the features of previous claims 5 and 7, which specified that the extracting parameters are on a plurality of levels and are calculated based on a value found by dividing a maximum of the first averages by the second average. Fujimoto is silent to this limitation, and claims 1, 11, 21, and 35 are allowable for this reason.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Colin M. LaRose whose telephone number is (571) 272-7423. If attempts to reach the examiner by telephone are unsuccessful, the examiner's acting supervisor, Jingge Wu, can be reached on (571) 272-7429. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600 Customer Service Office whose telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

Art Unit: 2623

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CML
Group Art Unit 2623
28 September 2005



VIKKRAM BALI
PRIMARY EXAMINER